

**Frequency determination of Sarcocystis in samples collected from slaughtered sheep using squashed technique and digestion method in Ardabil, Northwestern Iran**

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**Background:** Sarcocystosis is a zoonotic disease caused by *Sarcocystis* species in mammals, reptiles and birds. The aim of this study was the frequency determination of sarcocystis in samples collected from slaughtered sheep using squashed technique and digestion method in Ardabil, northwestern Iran.

**Materials and methods:** A total of 200 sheep carcasses were examined randomly for macrosarcocysts detection by direct observation in Ardabil slaughterhouse. Oesophagus, diaphragm and heart muscles of 120 sheep without macroscopic cysts were collected. Microscopic cysts were determined using both squashed technique and digestion method. After digestion of tissue samples by acid pepsin, bradyzoites were stained by Giemsa.

**Results:** Macrosarcocysts of *Sarcocystis* spp. were found in 62 of the 200 examined sheep carcasses (31%). Microscopic cysts were recognized in 41.6% of squashed samples and 100% of samples using tissue digestion method

**Conclusion:** Sarcocystosis is highly prevalent in sheep in Ardabil province and tissue digestion method is very reliable for detection of sarcocystis bradyzoites.